

**Mars Exploration Rovers  
(MER) Safety  
Plan/Requirements for  
Visitation and Media  
Coverage for MER Landings  
in January 2004**

**Prepared By**

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January 22, 2004

## **Mars Exploration Rovers (MER) Safety Plan/Requirements for Visitation and Media Coverage for MER Landings in January 2004 (Rev 2)**

### **Project/Event**

*Arrival of Spirit:* January 3, 2004 between 8-9 PM PST *Arrival of Opportunity:* January 24, 2004 between 8-9 PM PST. JPL will host Media coverage of the MER landings. We expect over 500 visitors and Media representatives from various networks both American and Foreign. Preparation activities will be very active from December 29, 2003 to initial arrival of Spirit on January 3, 2003.

### **Mission Background**

*Launch of Spirit:* June 10, 2003; *Launch of Opportunity:* July 7, 2003

Two powerful new Mars rovers are due to land on Mars. These robotic explorers may trek as much as 40 meters (44 yards) across the surface in a day. Each rover carries a sophisticated set of instruments to search for evidence of liquid water that may have been present in the planet's past. The rovers are identical to each other, but will land at different regions of Mars. Upon landing, a parachute will deploy to slow the spacecraft, rockets will fire to slow it further just before impact, and airbags will inflate to cushion the landing. Upon reaching the surface, the spacecraft will bounce about a dozen times, and could roll as far as one kilometer (0.6 mile). When it stops, the airbags will deflate and retract and the petals will open up, bringing the lander to an upright position and revealing the rover. Using images and spectra taken daily from the rovers, scientists will command the vehicle to go to rock and soil targets of interest and evaluate their composition and their texture at microscopic scales. Initial targets may be close to the landing sites, but later targets can be far a field. These rovers will be able to travel almost as far in one Martian day as the Sojourner rover did over its entire lifetime. Rocks and soils will be analyzed with a set of five instruments on each rover, and a special device called the rock abrasion tool will be used to expose fresh rock surfaces for study. Each rover has a mass of nearly 180 kilograms (about 400 pounds). The prime mission for each rover will last three months on the surface.

This event will be covered by numerous media representatives and witnessed by many visitors and JPL employees. The following Safety Plan will highlight potential hazards associated with this event as well as identify key points of contact and procedures associated with insuring a safe environment for this event.

### **Phase I – November 24-28, 2003 MER A (Spirit)**

In preparation for the event, during the week of November 24, 2003, building 186 Museum will be emptied by Kim Lievens of Media Relations/Public Affairs and her team of 8 employees. The employees are experienced in disassembly and movement of the unique museum items. The greatest potential hazards associated with this task are back injuries, strains, and sprains. All employees have received Back Safety training and Kim Lievens will hold tailgate safety meetings associated with this task to raise the employee's awareness regarding back safety and proper lifting techniques during this task.

### **MER B (Opportunity) January 19-23**

In preparation for the event set-up, a total of nine areas have been identified at JPL for usage during the MER B activities and landing: *180-101, 230 Gallery, rooms 108 and 109, 301-367, 301-427, 303 Cafeteria, 317 viewing room and 264 vonKarman*. Transportation (Mike Nieto 1-818-354-8513) will be assisting Kim Lievens's team in room set up and coordination. Pasadena City College Sexton Auditorium will be the offsite location for invited guests to attend the coverage. Pre-planning and safety meetings will focus on safety lifting, not rushing and requesting assistances when items are bulky or too large or heavy for one person to safely handle.

### **Phase II – December 1, 2003-February 15, 2004**

Beginning December 1, 2003, facilities will construct a Press Room within the cleared space of Building 186 Museum areas. Construction activities will continue within this area until the Knoll furniture and electric cabling are in place to support the Media and Media Relations Press Room. Target date for completion is December 25, 2003. Anthon Davis (4-7522), Facilities will be the point of contact for this activity. Hazards associated with this construction activity are poor housekeeping, trips and falls, hand and eye injuries, lifting injuries, and tool usage injuries. Safety tailgate meetings will be held to insure employees are aware of the potential hazards. All electrical wiring/cabling will be secured, covered, or taped appropriately to eliminate a tripping hazard. Appropriate signage will be placed as necessary to identify the egress route. Good housekeeping will be communicated as a safety priority and highlighted to all workers during the construction activities. Kathleen Walsh, Enterprise Network, will ensure any network installation and electrical wiring is completed to eliminate any potential trip hazards.

Building 186 Press Room is scheduled to officially open 12/29/03, close 12/30/03 and 12/31/03. Re-open on 1/2/04 to 2/15/04.

### **Phase III – December 29, 2003-February 15, 2004**

The Visitor's Parking Lot (see Figure 1 below) has been designated as the location for the multi-media trucks and JPL office trailers. Three JPL office trailers will be positioned by December 1, 2003 in the Visitor's Parking Lot. Steve Benson, Facilities, will position the office trailers. The primary hazard associated with this task is proper stabilizing of the office trailers and support

structures specifically ensuring that the stairways to access the office trailers are equipped with proper railings. Potential hazards that will be addressed are chocking the trailer wheels to prevent inadvertent movement and providing walkovers for electrical wiring/cables. Caution safety tape will be used as appropriate. In the event of high winds all attachments must be secured in place. Security and Emergency Preparedness will monitor the weather reports.

The media truck/trailers will be positioned along the fence line within the Visitor's Parking Lot. Electrical power lines (110-120 volts) will be placed along the fence line toward the Main Gate. Large covers will contain the electric cables. Media trucks/trailers may house generators. Grounding of generators should not be an issue, unless they are not a part of the trucks/trailers. Media trucks/trailers may be positioned in this area as late as February 15, 2004.

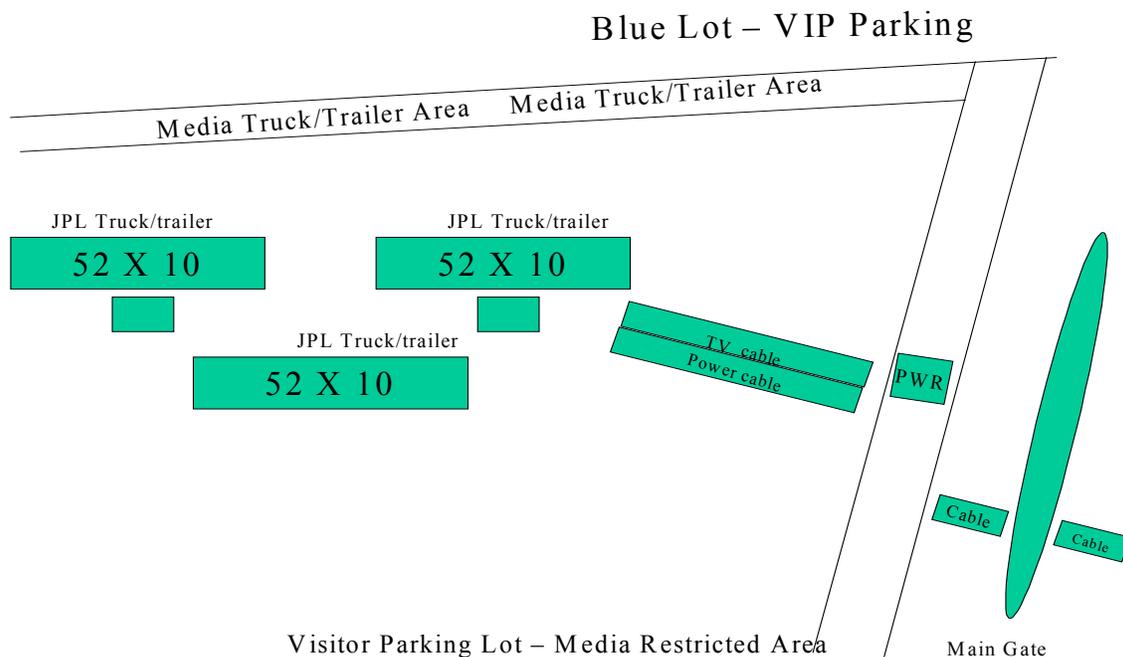
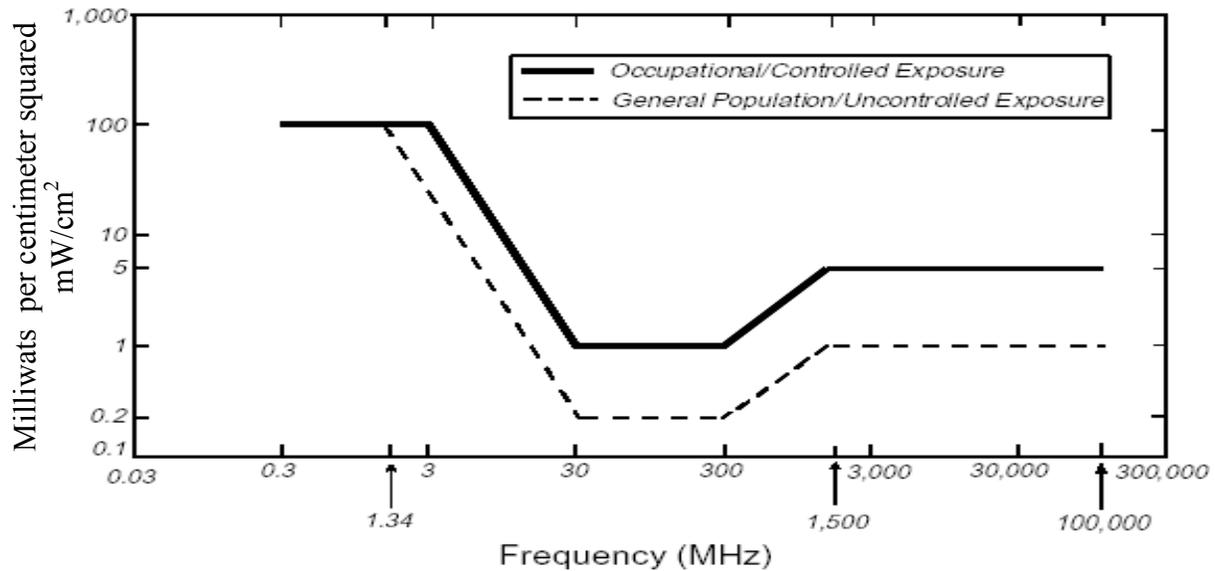


Figure 1

**Radio Frequency Safety:** Radio Frequency (RF) energy is now recognized as a potential physical hazard; we must consider Jet Propulsion Laboratory (JPL) worker's exposure during the media operations throughout the Mars Exploration Rover (MER) Landings. Because the majority of JPL employees are not educated in the physical hazards associated with RF energy, all energy levels must remain below the "Uncontrolled Levels" identified in Figure 2. The OSPO will conduct a survey prior to the deployment of media personnel and after their arrival and transmission to ensure employee safety and safe operating levels for all personnel.

Figure 2 *FCC Limits for Maximum Permissible Exposure (MPE)*  
*Plane-wave Equivalent Power Density*



To ensure that all transmitting agencies (media) are in compliance with FCC Regulations, FCC Licenses and Environmental Assessment (EA) shall be made available upon request.

**Phase IV – December 29, 2003-February 15, 2004**

Cecil Brower, Security, will ensure that the Visitor’s Parking Lot will be a controlled access and a “media only” area. Traffic will not be allowed directly through the Visitors Parking Lot to the Blue Lot. The back gate access will be used to route traffic into the Blue Lot. The Blue Lot will be designated for VIP parking and will be controlled by Security and Protective Services.

The potential hazard associated with the Visitor’s Parking Lot would be additional vehicular traffic in the area with numerous media personnel, coupled with the large amounts of electrical cabling (110-120 volt). Overflow media traffic that cannot be accommodated in the Visitor’s Parking Lot will be staged along Mariner road.

All media will have informational packets, including security passes and emergency safety information. Security and Protective Services will conduct Media personnel orientations as they arrive. Media group orientations will not be possible due to diverse arrival dates and times. Security and Protective Services will brief the media on a case- by-case basis and ensure all receive media packets. Additional Security and Protective Services officers will be available to patrol the immediate areas at all times.

**MER B-January 24& 25 2004- Security cont.**

(Point of Contact Joe Courtney 1-818-393-3631). Entrance to JPL for all volunteers and support personnel will be through the East Gate if arriving after 4pm and depart by midnight on both January 24<sup>th</sup> and 25<sup>th</sup>. All parties arriving prior to 4pm must access the laboratory through the

Main Entrance Gate. JPL identification badges should be worn and visible at all times. Road closures will be: DSN Road (between Ranger and Mariner Road) exceptions will be made for Caltech Food Service Vehicles. No street parking or traffic road access will be authorized on Mariner Road west of Surveyor. Exceptions to authorized traffic and parking in this area will be shuttle buses for VIP transport, Cafeteria food delivery and Executive Council parking under building 167.

**Phase V – December 29, 2003-February 15, 2004**

Media personnel will not be allowed to tie-in to any electrical power at JPL at any time during this event. This has been identified as a potential hazard. Vaji Nasoordeen, Facilities, has contracted an electrician from Dyna Electric who will be available 24/7 to assist and will be the only authorized individual to provide power to the media organizations when requested. The request will be processed through Security who will contact Steve Benson (4-8872) or (cell 818-943-5717), Cory Borst (4-0819) or (cell 818-655-5356), or Greg Hanchett (4-2113) or (cell 818-653-5358) who will approve the request and give authorization to the Dyna Electric electrician to perform the work.

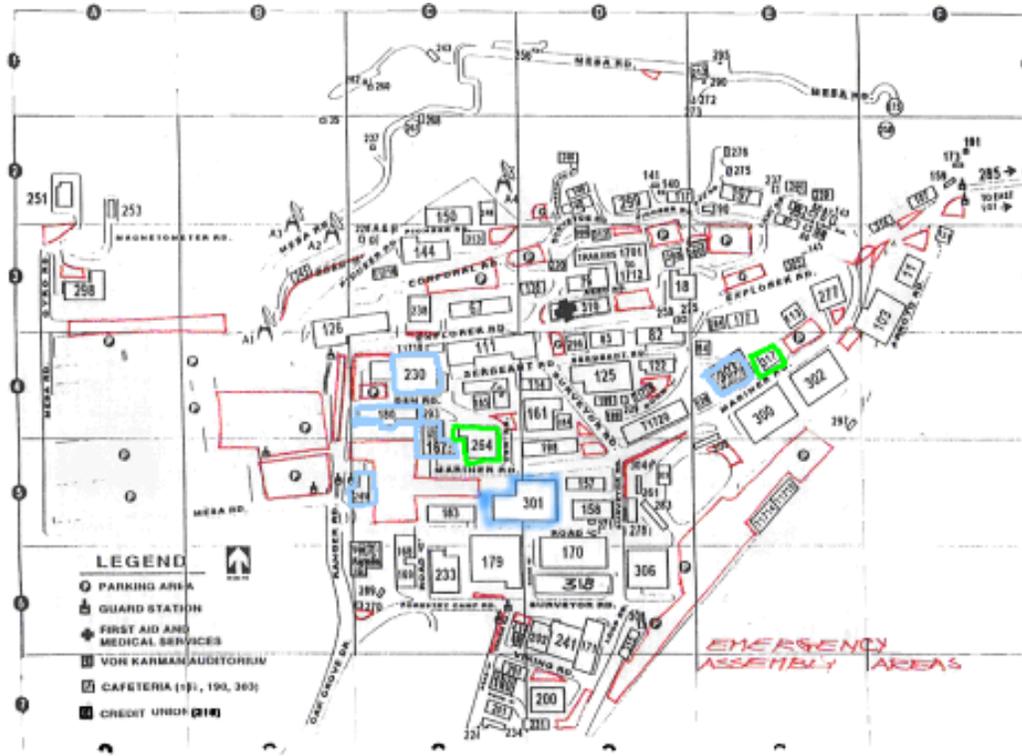
**Phase VI – January 3-4, 2004 and January 24-25, 2004**

**Assembly Areas in the Event of Evacuation**

Emergency Preparedness Administrator, Eric Fuller, and Security and Protective Services will determine the need for evacuations with OSPO input due to inclement weather or other emergency conditions that may arise.

**JPL Map of Emergency Assembly Areas**

**Figure 3**



**LEGEND:**  
 Red=Assembly Areas  
 Blue= Buildings for Observation of MER Landings by JPL Employees and Visitors  
 Green= Mission Operations

**Phase VII  
Human Resources and MER Project Support**

Beginning on January 3, 2004, the following activities are being coordinated to assist in round-the-clock MER mission operations through the anticipated end-of-mission (early May). The Primary hazard is employee fatigue. The point of contact for these activities is Michael Chilicki (4-4149).

- Provision of 5 “sleeping” cots on each of 3 floors of Building 264 to enable individuals to take “off-duty” naps. Additionally, the Wellness Center has been reserved (12 cots) for weekend use and off-hours use Monday-Friday as a nap room, along with a conference room (5 cots) in Building 301.
- Special food service will be provided in a moving two-hour block timeframe after normal working hours and on weekends to accommodate the MER Project Science Teams working late evenings, very early mornings, and weekends. Food will be provided via a refrigerated cart and sold on-site in Building 264 by Caltech Food Service personnel.
- Provisions are being made to provide additional janitorial service to the primary MER Project floors in Building 264. This will include a minimum daily service (including Saturday and Sunday) of trash pick-up and restroom cleaning.
- Special parking provisions are being set-up by Security and the Parking Office to permit on-Lab parking for certain members of the MER Project in the northwest corner of the Laboratory.
- Medical Services will be available to provide blood pressure checks and “gym physicals” on-site at Building 264 and other facilities housing MER Project personnel. EAP counseling will also be available, if needed. Additionally, many MER Project personnel have already attended a special briefing on “fatigue countermeasures” presented by NASA Ames Research Center, as well as receiving a special summary document on handling fatigue.
- Assistance has also been provided to find local “long-term” housing arrangements in the Pasadena area for visiting MER scientists and Ames Research Center personnel to minimize their commute time to JPL.
- **JPL Occupational Health Services Staff On Duty During MER-B Entry, Descent & Landing Operations**

Current as of 01/21/04

<b>Date</b>	<b>Shift</b>	<b>On Duty in Clinic (except as noted)</b>	<b>Contact Number</b>
THU 01/22/04	4PM-12MN	B. Seiden, RN	pager 888-458-5105
FRI 01/23/04	12M-8AM	L. Pellicer, RN	pager 888-458-5105
	7:30AM-4PM	OHS Staff	354-3319
	4PM-12MN	B. Seiden, RN	pager 888-458-5105
SAT 01/24/04	12M-8AM	L. Pellicer, RN	pager 888-458-5105
	8AM-4PM	B. Hellerud, RN	pager 888-458-5105
	4PM-12MN	Dr. Estrada/K. MacTavish, RN	pager 888-458-5105

SUN 01/25/04	12M-8AM	L. Pellicer, RN	pager 888-458-5105
	8AM-4PM	B. Seiden, RN	pager 888-458-5105
	4PM-12MN	D. Shaddock, RN	pager 888-458-5105
MON 01/26/04	12M-7:30AM	L. Pellicer, RN	pager 888-458-5105
	7:30AM-4PM	OHS Staff	354-3319
	4PM-12MN	S. Harper, RN (to 10PM)/ Dr. Estrada (on-call to 12MN)	pager 888-458-5105 626-627-8584

During regular business hours (7:30am-4:15pm, M-F), contact OHS at 818-354-3319 or Cynthia Cooper of EAP at 818-354-3680.

Dr. Estrada and Cynthia Cooper are on-call for urgent after-hours consultations at the following cell phone numbers:

Dr. Estrada 626-627-8584  
Cynthia Cooper (EAP) 818-653-9552

### Phase VIII

**Food Service** (Point of contact for this activity is Bonny Gerszt 393-6519)

- The 190 Cafeteria will be open during the MER B coverage period for JPL employees to view the coverage on January 24 & 25 from 6:30pm to 10pm. Food Service will not be available. Employees are requested to stay out of the kitchen and serving areas. Water will be accessible. Caution tape will be placed to close off unauthorized areas. A security guard will be assigned to provide coverage.

Catering Requests for Opportunity EDL Event							
January 24 and January 25, 2004							
Project/Task Number: 101884 11.1.1.3							
DDF Log No. Auth Code	Location	Day	Date	Serving Time	End Time	No. of Guests	Who
1423-2316	180-904 Hallway	Saturday	1/24/04	11:30 a.m.	1:00 p.m.	15	Director's Office/Guests
1425-2312	186-123	Saturday	1/24/04	12:00 noon	n/a	100	PIO/PSO workers
1427-2310	186-123	Saturday	1/24/04	5:30 p.m.	n/a	75	PIO/PSO workers
1427-2310	249-Visitor Reception	Saturday	1/24/04	5:30 p.m.	n/a	45	PIO/PSO workers
1428-2319	167-Special Events Room	Saturday	1/24/04	5:15 p.m.	8:00 p.m.	110	CMSA, SMSA, NAV
1427-2310	230-Dark Room	Saturday	1/24/04	5:30 p.m.	n/a	20	MER DSMS Support
1429-2322	264-550	Saturday	1/24/04	6:30 p.m.	n/a	40	EDL Reconstruction Team
1427-2310	264-450	Saturday	1/24/04	6:30 p.m.	n/a	100	Visiting Scientists
1429-2322	264-875	Saturday	1/24/04	6:30 p.m.	n/a	20	MER Support Staff Division/Section Managers
1430-2320	PCC-Sexton Aud	Saturday	1/24/04	6:30 p.m.	12:00 mid	1500	MER Family and Friends
1431-2323	167-Wellness Center	Saturday	1/24/04	6:30 p.m.	10:30 p.m.*	100	VIP - Guest Operations
1431-2323	180-101	Saturday	1/24/04	6:30 p.m.	10:30 p.m.*	100	VIP - Guest Operations



			Public Services Office		
		230-Gallery: Hors D'oeuvres, desserts, and beverages to be set up in 230-2nd floor lobby (to the right as one enters)			
		180-101: Catered Dinner Buffet to be set up in 180 - 1st floor lobby ( to the right as one enters); drinks			
			to be set up in the hallway outside of 180-101. Desserts are to be set up in 180-1st floor lobby		

- Special food service will be provided in a moving two-hour block timeframe after normal working hours and on weekends to accommodate the MER Project Science Teams working late evenings, very early mornings, and weekends. Food will be provided via a refrigerated cart and sold on-site in Building 264 by Caltech Food Service personnel.
- Café 167 dining room will be available for employees working on Lab on January 3 and 4 to use.
- Vending Machines have been placed in building 265 rooms 644.
- The Coffee Rover on the Mall will be open on January 3 and 4. Specific times yet to be determined.
- Building 303 and 190 Cafeteria will be closed to JPL employees during the weeks of Christmas and New Years (December 24, 2003 through December 28, 2003 and December 31, 2003 through January 4, 2004).

## Phase IX

### Caltech Activities- MER A

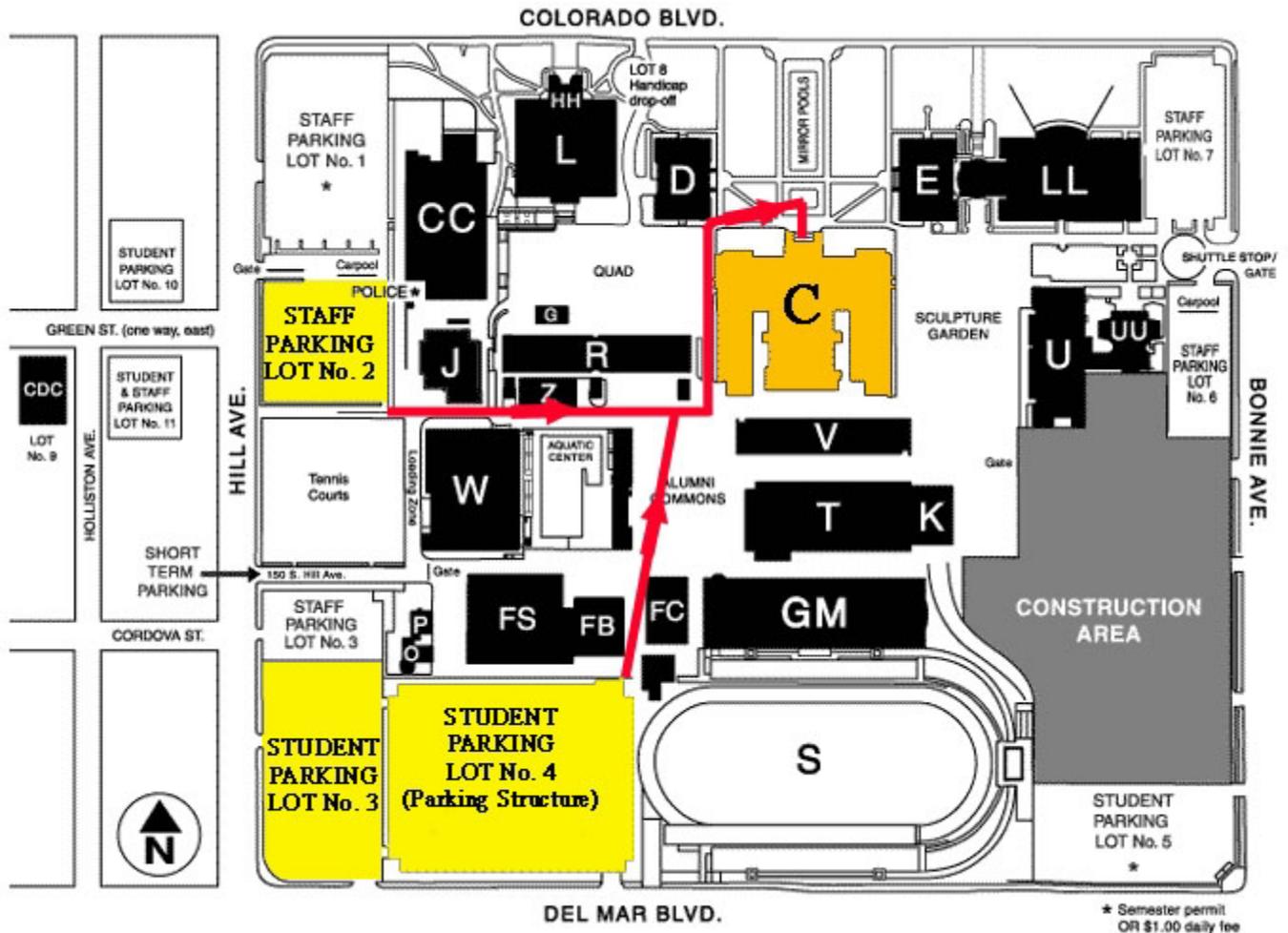
One thousand plus guests will arrive at Caltech's Beckman Auditorium 6:30 PM-2:00 AM, 1/3/04 and 9:00 AM-10: 30 PM, 1/4/04.

### Pasadena City College- MER B

Sexton Auditorium at Pasadena City College will host the event for JPL employees and guests. We expect attendance to exceed 1500. The maximum capacity is 2,000. January 24<sup>th</sup> coverage will begin from 7:00-11:00 PM and January 25 from 9:00-10:00 PM.

Below is a Pasadena City College campus map. All guests may park in "Student Parking Lot No. 4" (Parking Structure) on January 24th and 25th, 2004. Student Parking Lot No. 3 (adjacent to the parking structure) and Student Parking Lot No.2 (entrance on Hill Ave.) will also be available as overflow parking on both days. Parking is free at all locations.

Sexson Auditorium is located in Building C, Room 230. Check-in for the event will be located at the main entrance of the auditorium on the North side of Building C (facing Colorado Blvd.).



**General Coordination/Information**

- One cell phone number, 818-625-4431, will be used to contact OSPO for safety concerns.
- Facilities have coordinated with the Environmental Affairs Program Office regarding recycling.
- A three-yard trash bin has been placed in the Visitor’s Lot west of the guard shack.
- Daily pick-up of trash and locations of bins has been coordinated by Facilities.
- No additional restrooms will be provided.
- Safety Professional(s) will be a “rover” during press conference and all activities 1/3&1/4 and 1/24&1/25.
- All communications towers will not be located within 20ft of power lines.
- Covers, caution signage, and caution tape will be placed as appropriate.
- Building 303 Cafeteria will be closed to JPL employees during the weeks of Christmas and New Years (December 24, 2003 through December 28, 2003 and December 31, 2003 through January 4, 2004)
- JPL Store will provide merchandise on the Mall 1/24-25 if weather conditions are acceptable.
- Five hundred plus visitors are expected at JPL on Saturday, January 3-4, 2004. Extra parking will not be needed as only a few employees will be on Lab. Guests arrive on 1/3/04

at 6:30pm-1:00am, guests arrive on 1/4/04 at 6:30pm-9:00 PM or 10:00 PM. The same schedule will apply for 1/24-25/04. No visitors will be allowed into von Karman during this timeframe (signage posted)

- Chuck Buri is actively pursuing control of the deer population.

**Initial Safety Preparation Meeting: November 18, 2003 – 9:00 AM**

**Attendees:**

Name	Organization Name	Organization Number	Mail Stop	JPL Phone	Cell Phone
Steven Benson	Facilities	2814	200-213	4-8872	818-943-5717
Cory Borst	Audio-Visual	1820	186-AUD	4-0819	818-655-5356
Stephen Bridges	Audio-Visual	1820	186-AUD	4-7700	818-653-5354
Cecil Brower	Security	2851	310-219	3-3536	818-625-5095
Pamela Brown	OSPO	5322	200-122	4-8081	818-625-4431
Georgina Fontes*	Media Relations Office	1810	186-120	4-9380	-----
Gregory Hanchett	Audio-Visual	1820	186-AUD	4-2113	818-653-5358
Kim Lievense	Media Relations Office/Public Affairs	1840	186-113	4-0112	-----
Jeanne Long*	OSPO	5322	200-122	3-4262	818-640-1960
Vaji Nasoordeen	Facilities	2820	200-203	4-4922	-----
David Schnabel	All Star	2820		4-4823	626-926-0688
Trish Smith-Araki	OSPO	5320	190-115	4-9893	818-625-2897
Kathleen Walsh	Enterprise Networks and Telecommunications Group	366J	171-231	4-8237	818-731-5029

\*Administrative Support

**Safety issues/concerns identified during initial safety preparation meeting:**

1. Adequate and correct trailer support/shoring
  - a. Liability issue for JPL to direct. Ensure requirements are understood. Follow-up on requirements
2. Power lines: Electrical, radio power, masts/transmitters
3. Grounding: Facilities to install; OSPO to inspect
4. Deer
5. Weather: Wind, rain, etc.
6. Radio frequency transmission
7. Visitors/looky-loos
8. Electrical power along fence lines
9. Parking/Pedestrians/Traffic: Security and Protective Services
10. VIP in Blue Lot
11. Slips/Trips/Falls
  - a. Route from Visitor Center→Building 249→Building 180→Building 230→Building 167 Conference→Building 167Cafeteria→Building 303 Cafeteria has slip/trip/fall hazards and area will be dark. Employees will use flashlights per Kim Lievense with safety tailgate awareness briefings. Trees trimmed to allow as much lighting through as possible.
  - b. Pre-inspection of route: daytime and nighttime: Pamela Brown with Facilities support

**MER B (Spirit) Final Coordination Meeting and Lessons Learned from MER A Activities:  
Held January 20, 2004 from 1-2pm.**

**Attendees:**

<b>Name</b>	<b>Organization Name</b>	<b>Organization Number</b>	<b>Mail Stop</b>	<b>JPL Phone</b>	<b>Cell Phone</b>
Stephen Bridges	Audio-Visual	1820	186-AUD	4-7700	818-653-5354
Cecil Brower	Security	2851	310-219	3-3536	818-625-5095
Pamela Brown	OSPO	5322	200-122	4-8081	818-625-4431
Michael Chandless	Security	2852	310-129	3-3990	661-305-6597
Michael Chilicki	Human Resources	2400	180-502	4-4149	-----
Joseph Courtney	Security	2852	310-129	3-3631	-----
Claudia deLuna	Institutional Network Service	366J	171-231	4-8253	818-731-4953
Bob Deville	Facilities	2810	200-213	4-4556	-----
Robert Gallego	Transportation	2725	284	3-2966	-----
Bonnie Gerszt	Logistics and Technical Information	2700	111-118	3-6519	818-653-9450
Mark Gutheinz	Facilities	2820	186-113	4-4922	-----
Sharon Hope	IT	355M	144-210	3-5294	626-482-3017
Henry Koyamatsu	Environmental	5330	171-225	4-3873	-----
Kim Lievense	Media Relations Office/ Public Affairs	1840	186-113	4-0112	-----
Jeanne Long*	OSPO	5322	200-122	3-4262	818-640-9106
Anne Mercuri	Facilities			4-0890	-----
Mike Nieto	Transportation	2725	284	4-8513	-----
Trish Smith-Araki	OSPO	5320	190-115	4-9893	818-625-2897
Kathleen Walsh	Enterprise Networks and Telecommunications Group	366J	171-231	4-8237	818-731-5029
Joseph Williams	Public Services	1840	186-113	4-9626	818-402-0911
Michael Young	IT			4-8235	818-731-5013

\*Administrative Support

**Lessons Learned discussion regarding Safety items:**

- **Safety Glasses needed for escorts as wind and dust caused some concern during Spirit on Jan 3rd. Safety glasses will be available for escorts if needed in the visitor's center. Occupational Safety Program Office will provide this item.**
- **Escorts needed additional larger flashlights. Occupational Safety Program Office will provide this item and will be available to escorts in the visitor's center.**
- **Carpets were placed over low voltage electrical communication lines in vonKarmon. Covers have been ordered. Occupational Safety Program Office will provide additional monitoring and cones to highlight the areas. The carpet will be removed.**
- **VonKarman has an occupancy capacity of 488. Headcount was not being taken during the spirit activity coverage during press meetings etc. Security and Kim Lievense's team will work together to ensure a count is taken. In addition, individual were moving behind displays in to restricted areas. Additional, Safety professionals will assist security to control this issue.**

- **Badge identification as to the authorized location and relationship to the colored dots that are placed on the badges was not know to security officers or safety professionals. This information will be provided by Kim Lievense at the beginning of the event coverage on the 24<sup>th</sup> and 25<sup>th</sup> in the visitors center.**

## **Phase X**

### **IT Security (Point of contact Sharon Hope 3x5294)**

The IT Emergency Operations Center (IT EOC) will be activated for MER B in 202-230B for a period to be specified by the CIO (spanning at least TCM 5x through EDL). ICIS support services will be on site, rather than on call, for that period.

The IT EOC will track operational and IT Security status, and, if necessary, prioritize coordinated response to IT emergencies, in accordance with the JPL IT Contingency Plan (<http://rules/cgi/doc-gw.pl?DocID=62013&ViewDocument=1>).

For those critical operational Projects and Programs that are staffed over the MER B activation period, IT status reporting via the web-based ITSR tool will be at the increased frequency of every 2 hours (on the hour, for each odd hour), and immediately upon a change in status. In addition, participating Projects and Programs will maintain voice contact with the IT EOC via a MeetingPlace telephone conference.

A summary snapshot of the operational status reported to the ITSR may be viewed via the "InsideJPL" portal, selecting the link "JPL Operational Status" (in the upper right-hand corner of the default display, below "Status and Alerts"). A more comprehensive display is available directly via the ITSR, using a JPL username and password login, at URL: <https://webdev.jpl.nasa.gov/itsr>.

At the end of the IT EOC activation for MER B, the ITSR status reporting will resume at a frequency of once per week, and immediately upon a change in status, due to the ongoing post-9/11 activation, continuing as long as Homeland Security Threat Advisory is "Elevated/Yellow" or above.

## **Phase XI**

### **Environmental Health and Safety Staff Coverage (EH&S)**

The schedule below denotes the general location (coverage area), number of safety professionals assigned to that area, hours of availability and coverage by MER landing dates. A general Safety briefing will be provided to each safety professional as to the scope of the duties during this period. Each safety professional will be identified by a reflective orange safety armband and will have a flashlight to assist in escort of visitors and guests. Safety will work closely with Security Personnel in the area of personnel observations and restricted area control. Safety Professionals providing coverage for PCC Sexton auditorium will coordinate with PCC Security. The Point of contact is Lt. Brad Young. Central dispatch 1-626-585-7484 regarding any issues or concern that require additional coordination.

## EH & S Schedule for Support Coverage during MER Landings

January 3, 2004 - Saturday					
No.	Area	Name	Org. Name & No.	Date	Time
1	Bldg. 180 – Step Area, 1 staff	1. Trish Smith-Araki	OSPO 5320	1/3/04	6pm - 1am
2		Bldg. 230 – Step/Lobby, 1 staff	1. Elaine Cottle	OSPO 5321	1/3/04
3	Btw. Bldgs.249 and 303, along Mariner Rd. 2 staff	1. Charlene Ching	OSPO 5322	1/3/04	6pm -
		2. Chuck Kasnow	OSPO 5320		1am
4	Caltech – Beckman Auditorium, 3 staff	1. Steve Greenberg	SSPO 5310	1/3/04	6pm -
		2. Gregg Ellers	SSPO 5310		2am
		3. Barbara Bleiler	OSPO 5231		
January 4, 2004 - Sunday					
No.	Area	Name	Org. Name & No.	Date	Time
1	Bldg. 180 – Step Area, 1 staff	1. Trish Smith-Araki	OSPO 5320	1/4/04	6pm - 1am
2		Bldg. 230 – Step/Lobby, 1 staff	1. Karen Moran	SSPO 5321	1/4/04
3	Btw. Bldgs.249 and 303, along Mariner Rd. 2 staff	1. Henry Koyamatsu	EH 5330	1/4/04	6pm -
		2. Alvaro Camas	OSPO 5231		1am
4	Caltech – Beckman Auditorium, 3 staff	1. Steve Greenberg	SSPO 5310	1/4/04	6pm -
		2. Gregg Ellers	SSPO 5310		2am
		3. Christian Benitez	EH 5330		
January 24, 2004 - Saturday					
No.	Area	Name	Org. Name & No.	Date	Time
1	Bldg. 180 – Step Area, 1 staff	1. Robin Shuey	OSPO 5322	1/24/04	6pm - 1am
2		Bldg. 230 – Step/Lobby, 1 staff	1. Trish Smith-Araki	OSPO 5320	1/24/04
3	Btw. Bldgs.249 and 303, Along Mariner Rd and vonKarmon/ Mall areas. 2 staff	1. Jason King	OSPO 5320	1/24/04	6pm -
		2. David Lomeli	OSPO 5321		1am
4	Pasadena City College Sexton Auditorium 3 staff	1. Chuck Kasnow	OSPO 5320	1/24/04	6pm -
		2. Elaine Cottle	OSPO 5321		1am
		3. Mike Swanson	OSPO 5323		

January 25, 2004 - Sunday					
No.	Area	Name	Org. Name & No.	Date	Time
1	Bldg. 180 – Step Area, 1 staff	1. Trish Smith-Araki	OSPO 5320	1/25/04	6pm - 1am
2		Bldg. 230 – Step/Lobby, 1 staff	1. Charlene Ching	OSPO 5321	1/25/04
3	Btw. Bldgs.249 and 303, along Mariner Rd. and von Karmon/ Mall areas. 2 staff		1. Alina Hovakimian	OSPO 5322	1/25/04
		2. Jeannine Darrett	OSPO 5322		
	Pasadena City College	1. Ezra Abrahamy	OSPO 5320	1/25/04	8pm- 11pm
	Sexton Auditorium	2. Jason Palmer	OSPO 5320		
	3 staff	3. Mike Swanson	OSPO 5323		

**EH & S Schedule for Support Coverage during MER Landings**

\* Pamela R. Brown will act as the Safety Rover during the entire coverage period on all dates and times. She will act as the Safety point person and single cell phone recipient as noted in the general coordination information noted in red for all Safety Concerns.

Ben Lucas, Systems Safety Program Office, will provide 12 hour support for MER with IT.

# **MER Project - 2004**

## **Human Factors Management Information**

**Prepared by the Occupational Safety Program Office**

**Pamela Brown, Manager**

**Elaine Cottle, Manager**



**Trish Smith-Araki.....Section Manager, 532**

**Frank Mortelliti.....Division Manager, 53**

**Matt Landano.....Director For 5X**

**Medical Advisory submitted by Robert Estrada, M.D. Occupational Health Services**

**Temporary Lodging Guidelines submitted by Michael Chilicki, Human Resources**

# MER Project - 2004

## The Occupational Safety Program Office (OSPO)

Points of Contact: Pamela Brown (818/625-4431) and Elaine Cottle (818/625-5083)

The OSPO has provided you with "Care Bags" to help prevent the spread of illness.

Instructions: (All products in the bag are for external use only):



- **Purell® Hand Sanitizer** – Place about a quarter size amount of hand sanitizer in your palm. Rub hands together to thoroughly cover your hands and allow a few seconds to dry. No need to rinse hands after use.
- **Wash'n Dri®** – Tear open foil packet from corner. Unfold towelette and use on your face and hands for refreshment
- **VioNex® Healthcare Antiseptic Towlette** – to wipe down equipment
- **Kleenex® White Facial Tissue**
- **Complimentary water and Power Bars provided by OSPO**

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### JPL Occupational Health Services

#### Medical Advisory

#### Controlling the Spread of Colds and the Flu

by Robert Estrada, MD, JPL Managing Physician

##### Beware of Colds and the Flu

Viral respiratory infections (colds, flu) spread rapidly in groups working closely together under stressful conditions, especially when they share articles such as telephones and computers. The toll on individuals, the team and the mission can be enormous. Respiratory infections such as the "cold" or "flu" are spread by infected nasal secretions, usually by hand to hand contact, but also through aerosols generated by sneezing, coughing, even speaking. Scrupulous hand washing is the best prevention. Avoid touching your face, eyes, nose or mouth if your hands have contacted an infected individual or contaminated articles. Alcohol-based hand rubs and antiseptic towelettes are effective when hand washing is not practical.



##### Be Public Health Conscious

Cover your mouth or nose when you cough or sneeze. This reduces the amount of germ-carrying aerosols, but don't forget that your hand is now contaminated. Wash it or use an antiseptic hand rub or towelette as soon as possible before you touch articles that others might use. Disinfectant surface wipes are helpful in cleaning articles such as computer keyboards, mice, telephones, countertops and other articles that co-workers may have used. Use them at least at each change of shift.

##### The Public vs. the Private Hand

A good habit to get into is to use your right hand as the "public hand" that you shake hands with and touch items in the environment, such as doorknobs and telephones. Consider that hand potentially contaminated and never touch your face with it unless you have washed your hands. Use your left hand as the "private hand" that can touch the face, but avoid using it to handle potentially contaminated surfaces or articles in the environment.

##### If You Feel Illness Coming On

If you feel the early stages of illness, rest often, don't push yourself, drink plenty of fluids and take over-the-counter medications for relief of the symptoms. You may not be able to avoid the illness but you can limit its severity.



##### If You Are Definitely Sick

Stay home if at all possible! You'll recover quicker and you'll prevent spreading the illness to others. Take oral or nasal spray decongestants if your nose is congested unless there is a medical reason why you shouldn't. Read the label and/or consult your doctor. Keeping the nasal passages open can prevent sinus infections. OTC saline nasal spray is effective in moisturizing the nasal passages and loosening mucus. Since it has no medication you can use it as much as desired. Breathing water mists in the shower, over a pot of boiling water or from a personal size vaporizer is very helpful for the nose and chest. Drink plenty of fluids. Hot, even salty fluids can help reduce chest congestion and phlegm. If you don't feel better in two or three days, if you are having sustained fevers over 101 degrees F, or if you are having shortness of breath, see your doctor right away.

##### The Flu



If you recently received a flu shot, the odds are very good that it will protect you against the influenza virus, in spite of the fact that the vaccine may not cover all the strains out in the community. If you have not received the flu shot and you are exposed to someone who has the flu, see your doctor right away. There are effective antiviral medications available that, if taken right after exposure, can prevent the illness. If you actually develop the flu, these medications can lessen the severity of the infection if taken right after symptoms develop. The characteristic symptoms of the flu are fever, usually high, headaches, extreme fatigue, body aches, dry cough and sore throat. See your doctor right away!

##### Your Health Is Crucial to the Success of this Mission

Take care of yourself and help prevent the spread of illness to other team members. Treat any illness aggressively and see your doctor if you aren't recovering as expected. **Come to the occupational health clinic in Building 310, second floor (ext. 4-3319)** if you need to be evaluated or need OTC medication for your symptoms.

# Human Resources

Point of Contact: Michael Chilicki (818/354-4149)

## Temporary Lodging Guidelines

(Effective January 15, 2004)

### Overview

JPL employees assigned to MER Mission Operations may be eligible to stay in temporary lodging in the Pasadena area due to fatigue issues resulting from extended work schedules. Three hotels may be used in Pasadena, with a maximum allowable lodging rate of \$106.00 per night:

<b>1) Sheraton Pasadena Hotel</b> 303 East Cordova Street (626) 449-4000 (JPL rate \$106.00)	<b>2) The Westin Pasadena</b> 191 North Los Robles (626) 792-2727 (Gov rate \$106.00)	<b>3) Courtyard Pasadena</b> 180 North Fair Oaks (626) 403-7600 (Gov rate \$106)
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### The following guidelines apply for temporary housing:



- Authorization** is only permitted for JPL employees working nonstandard work shifts during MER mission operations that have been identified by the MER Project Office. This does not apply to contractors and other affiliates associated with the MER Project.
- Hotel reservations** can be made by calling JPL's Travel Reservation Office at *extension 4-3140*.
  - JPL's Travel Reservation Office will make the hotel arrangements and confirm the accommodations with the individual employee.
  - For "after-hours" hotel reservations, the employees can call the *Omega* after-hours phone number at 800/ 285-6342 or call the hotel directly and identify themselves as a JPL employee.
  - Taxi service is authorized and may be utilized to get from JPL to the hotel and back. Additionally, a driver's tip of up to \$3.00 each way is authorized and may be reimbursed through the Travel Expense Report.
- Individuals must pay for their hotel room at the time of check-in**, and then be reimbursed by JPL after submission of a Travel Expense Report and accompanying receipts. The hotel rooms will not be direct billed to JPL. Taxi service expense, if applicable, shall also be included on the Travel Expense Report.
- Vehicle parking charges** at the hotel are reimbursable.
- Per Diem allowances** or reimbursements for food or toiletries are not authorized. (not reimbursable)
- Travel mileage** to and from the hotel is not authorized. (not reimbursable)

## Temporary Transportation Guidelines

### The following guidelines apply for taxi service from JPL to the individual's residence and back to JPL:

- Authorization** is only permitted for JPL employees working nonstandard work shifts during MER mission operations that have been identified by the MER Project Office. This does not apply to contractors and other affiliates associated with the MER Project.
- Taxi service** in the Pasadena area is governed by a flat rate that is regulated by the Department of Transportation. ALL Taxi services registered in the Pasadena area charge a flat \$2.00 per mile. There is no minimum charge and no maximum charge.
- Taxi service will be reimbursed** through the submission of a Mileage and Transportation Voucher, along with accompanying receipts for each expense. A driver's tip of up to 10% (to a maximum of \$10.00) each way is authorized and must be included on the Voucher.
- For cost effectiveness reasons**, it is recommended that employees living outside of a 50-mile radius consider staying in local hotel accommodations for the night.



### The following is a list of Taxi services and phone numbers in the Pasadena area:

Bell Cab Pasadena, CA 91105 (626) 808-1111	Checker Cab Company Pasadena, CA 91050 (626) 796-8294	Independent Taxi Owners Ass. Pasadena, CA 91050 (626) 440-0072	Pasadena Taxi Pasadena CA 91050 (626) 792-3400
City Cab Pasadena, CA 91050 (626) 578-0952	Yellow Cab Co. Pasadena, CA 91050 (626) 796-3111	Yellow Cab Pasadena, CA 91050 (626) 370-0055	